BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

DOCKET NO. 03-0360

For Approval to Commit Funds in)
Excess of \$500,000 for Item Y00030,)
New Dispatch Center (Which Includes)
A New Energy Management System).

DECISION AND ORDER NO. 21224

Filed August 6, 2004
At 2 o'clock P .M.

Chief Clerk of the Commission

DEPT OF COMMENTAL AND DEPT OF COMMENT AFFAIRS

ATTEST: A True Copy KAREN HIGASHI Chief Clerk, Public Utilities Commission, State of Hawaii.

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

In the Matter of the Application of)

HAWAIIAN ELECTRIC COMPANY, INC.

For Approval to Commit Funds in) Excess of \$500,000 for Item Y00030,) New Dispatch Center (Which Includes) A New Energy Management System). Docket No. 03-0360 Decision and Order No. 21224

DECISION AND ORDER

I.

Procedural Background

HAWAIIAN ELECTRIC COMPANY, INC. ("HECO") requests commission approval to commit an estimated \$22,909,230 for Item Y00030, its new Dispatch Center project, which includes a new Energy Management System ("EMS") ("Proposed Project"), through an application filed on October 2, 2003 ("Application"). HECO makes its request under Rule 2.3.g.2. of General Order No. 7, Standards for Electric Utility Service in the State of Hawaii ("Rule 2.3.g.2.").

HECO served the DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS, DIVISION OF CONSUMER ADVOCACY ("Consumer Advocate") with copies of the Application.

¹HECO submitted Attachments 1, 2, and 3 to the previously filed Application on October 3, 2003.

 $^{^{2}\}mbox{For the purposes of this order, "Rule" and "Paragraph" are synonymous.$

³No persons moved to intervene in this proceeding.

The commission ordered HECO and the Consumer Advocate (the "Parties") to meet informally to formulate and file a stipulated procedural order, or in the alternative, respective proposed orders to govern the proceedings of this docket in Order No. 20598, filed on October 28, 2003. The Parties filed their proposed stipulated procedural order on December 3, 2003, for the commission's review and approval. The commission issued Stipulated Procedural Order No. 20715 on December 15, 2003.

The Consumer Advocate served HECO with information requests ("IRs") on November 13, 2003, and December 29, 2003. HECO filed responses to those IRs on December 12, 2003, and January 20, 21, and 30, 2004.

The Consumer Advocate filed a letter on February 9, 2004, requesting an amendment to the procedural schedule of this proceeding ("Revised Schedule") and represented that HECO had no objections to this request. The commission issued Order No. 20807 on February 19, 2004, approving the Revised Schedule.

⁴The Parties filed their stipulated proposed protective order for the commission's review and approval on October 16, 2003. Protective Order No. 20610 was issued on October 29, 2003.

⁵The commission required the Parties to make their filing in compliance with Order No. 20598 within twenty (20) days of the date of the order, or on or about November 17, 2003. HECO, on behalf of the Parties, requested that the deadline to file the stipulated procedural order, or proposed orders, be extended until December 3, 2003, in a letter filed on November 14, 2003. The commission approved HECO's extension request in Order No. 20658, filed on November 20, 2003.

In compliance with the Revised Schedule, the Consumer Advocate filed its statement of position ("SOP") on March 12, 2004, while HECO filed its reply SOP on April 30, 2004 ("Reply SOP"). In its Reply SOP, HECO, among other things, informed the commission of its intention to meet with the Consumer Advocate in an effort to arrive at a joint letter to address the Consumer Advocate's concerns and clarify its recommendations.

The commission suspended the application of automatic approval provision of Rule 2.3.g.2., for the matters of this docket, in Order No. 20971 until further order of the commission on May 12, 2004. On June 18, 2004, the Parties filed setting letter forth certain joint agreements and clarifications to the Consumer Advocate's recommendations regarding HECO's Application ("Agreement Letter").

II.

Proposed Capital Improvement Project

Α.

Project Description

HECO proposes to locate its new Dispatch Center at its Ward Avenue facility located at 820 Ward Avenue. The Proposed Project includes the: (1) installation of a state-of-the-art EMS; (2) construction of a new Dispatch Center

03-0360

⁶HECO filed additional information in this docket on December 9, 2003, March 30, 2004, and May 13, 2004. In the March 30, 2004 filing, HECO informs us that the Proposed Project is consistent with its Integrated Resource Plan.

building and installation of a modern control room (with "dynamic" dispatch board displays, a dispatcher training simulator ("DTS"), and other Dispatch Center facilities); (3) installation of a backup Control Center (at an undisclosed separate location for security purposes); and (4) renovation work for the relocation of HECO's Call Center, Field Service and Meter Reading divisions, and storage and parking facilities displaced due to the Proposed Project.

Specifically, the scope of the Proposed Project is made up of the following capital improvement projects:

- Component P0000713 Construction of a new Dispatch Center building and related architectural, civil, structural, mechanical, and electrical work;
- 2. **Component P0000714** Relocation of displaced storage facilities;
- 3. **Component P0000715** Installation of new dispatch boards;
- 4. Component P0000716 Installation of new fiber optic lines, mobile radio terminals, and computer network infrastructure, and the redirection and termination of microwave and fiber optic communication circuits:
- 5. Component P0000717 Installation of new EMS hardware and software and a backup Control Center, and the removal of existing EMS equipment;
- 6. Component P0000718 Installation of a new DTS;
- 7. Component P0000793 Renovation of the existing Call Center to house the Field Service and Meter Reading divisions;
- 8. Component P0000794 Renovation of the existing Dispatch Center to house a new Call Center and removal of unused office equipment and furniture; and

9. **Component P0000795** - Assignment of parking for displaced operations and employee vehicles and the removal of existing portable office trailers.

Detailed descriptions of the various components that make up the Proposed Project are set forth in the Application.

В.

Project Justification

1.

Background Information

HECO views the Dispatch Center as its nerve center. Its System Operation Dispatchers control and monitor HECO's electrical system twenty-four (24) hours a day, seven (7) days a week from the Dispatch Center Control Room. HECO explained that critical power system functions are performed and coordinated in the Dispatch Center⁹ and that the EMS is central to the overall

While the Proposed Project also includes the removal of the existing EMS equipment, unused office equipment and furniture, and the existing portable office trailers; the cost of this removal work is not included in the cost of the Proposed Project. The associated removal costs will be charged to HECO's Account 108.00, Accumulated Provision for Depreciation of Utility Plant in Service as incurred.

 $^{^{8}}$ See, Application at 6-13.

⁹HECO lists the following operation functions as examples: (1) dispatching of the generating units providing electrical power; (2) performing/coordinating operations for scheduled outages for equipment maintenance; (3) restoring power after unscheduled outages; (4) monitoring the status and output of the generating units; (5) monitoring the power flow and status of the electrical grid; (6) coordinating the operations command center to respond to widespread outage or system emergencies; and (7) making continual adjustments to the power system to provide reliable electric power to its customers.

management of HECO's electrical system. The EMS consists of:

(1) the Supervisory Control and Data Acquisition system

("SCADA"); (2) the Automatic Generation Control and

Economic Dispatch systems; and (3) the Security Assessment

application. The Dispatch Center building houses and protects

the EMS along with other critical Dispatch Center systems, " which

are vital to HECO's operations.

HECO's current EMS was installed in 1982. Rockwell International ("Rockwell") produced the EMS and the hardware from Rockwell, Digital uses Corporation, and Aydin Controls. The EMS is used to dispatch HECO's generating units and to control and monitor equipment in HECO's sixteen (16) transmission substations. The EMS had a projected life expectancy of approximately ten (10) years. Since Rockwell exited from the SCADA/EMS market in 1982 and Aydin Controls discontinued support for its product in the 1980's, HECO has relied on its own resources to maintain, upgrade, and extend the life expectancy of its EMS.

2.

EMS and Dispatch Center Studies

Macro Corporation ("Macro") and Robert E. Lamb, Inc. ("Lamb") conducted an evaluation of the EMS at HECO's request in 1996 ("1996 EMS Study"). Lamb recommended that HECO replace the

¹⁰Along with the EMS, the telecommunications links, the Control Room, maps, map boards, radio communications, and the computer hardware and software are identified as Dispatch Center systems.

EMS to maintain system reliability based on its conclusion that HECO's existing EMS is at the end of its useful life. HECO did not implement the recommendation of the 1996 EMS Study due to, among other things, technical uncertainties related to the year 2000 rollover. HECO felt that it would be prudent to wait until after the century turnover had passed before committing to such a large project that could potentially be impacted by potential year 2000 events.

In 2001, HECO initiated a project to replace its EMS. In 2002, HECO commissioned KEMA Consulting ("KEMA") (formally known as, Macro) and Lamb to update the 1996 EMS Study. KEMA and Lamb completed its update in two (2) reports: (1) the EMS Revitalization Project Study of April 2003 ("EMS 2003 Study") and (2) the Facility Planning Study Report for Hawaiian Electric Company New Dispatch Center of August 2003 ("2003 Lamb Report").

The EMS 2003 Study concluded that HECO's current EMS is obsolete. The study stated that HECO's EMS has reliability that is less than desirable and that it is missing needed functionality. The study contended that the piece-meal upgrade of the EMS is problematic and that it could lead to unexpected consequences. The following are other operational concerns raised by the EMS 2003 Study:

- Obsolete hardware will be a continuing problem.
- Scan rates are slower than industry norms.¹¹

[&]quot;Scan rates are said to be the periodic time interval at which data on the system is collected. HECO represents that while the industry norm is between one (1) to four (4) seconds; its scan rate is presently at eight (8) seconds.

- Channel capacity limitations.
- Remote terminal unit communication interfaces are obsolete.
- Occasional unexplained lock-ups occur.
- Semi-proprietary protocol create limitations.
- User interface hardware is obsolete.
- Character graphic user interface display is limited.
- Data storage and dissemination capability is limited.
- Real-time analysis capabilities are limited. 12

Aside from operational concerns, the 2003 EMS Study also exposed various internal resource issues and concerns.13 Based on these findings and concerns, the EMS 2003 install without recommended that HECO а new EMS delay. It further recommended that provisions be made to temporarily install a new EMS in its existing Dispatch Center location if construction of a new Dispatch Center building is delayed. However, due to certain space constraints and logistical issues associated with its existing Dispatch Center, HECO decided to construct a new Dispatch Center building and install a new EMS in its new building.

Various shortcomings with HECO's existing Dispatch Center were first pointed out in the 1996 EMS Study. The 2003 Lamb report, commissioned to update the 1996 EMS Study, found that the Ward Avenue building is not suitable for continued

¹²See, Application at 18-19.

¹³See, Application at 19.

use as HECO's dispatch operations center. This finding was based on security concerns with respect to the physical location of the Dispatch Center in the Ward Avenue facility and concerns with the functional limitations of the current Dispatch Center.

HECO's existing Dispatch Center is located close to Ward Avenue, a well-traveled thoroughfare. The close proximity to Ward Avenue and the visitors to the Ward Avenue facility pose potential security threats to Dispatch Center operations, especially in light of the September 11, 2001 terrorist attacks. The 2003 Lamb report also pointed out the following deficiencies:

- The Dispatch Center is overcrowded and lacks functionality that is very common in other utility dispatch offices;
- Operators have a limited line of sight to the static map boards;
- Operators depend on magnetic markers and typed and hand-written notes affixed to the static map boards, which is inefficient;
- Operating information is difficult to share;
- Static map boards have limited capability;
- The Dispatch Center is located close to high personnel traffic;
- The Dispatch Center is congested due to limited space;
- There are high noise levels due to limited space in the center; and

• The ceiling height is relatively low as compared to industry dispatch centers. 14

3.

Additional Information

HECO states that the new Dispatch Center and EMS will provide its dispatchers with real-time information regarding its power system, and with the tools to remotely control the system to optimize generation dispatch, and predict the impacts of and analyze and manage emergency conditions. 15 It further contends that the Proposed Project will provide, among other things: (1) increased capabilities and functions of the EMS to address current deficiencies; (2) EMS scan rates at utility acceptable levels; (3) provisions for integration with other HECO systems; and (4) dynamic wall displays of maps and data. Recognizing that the new Dispatch Center building and new EMS are needed on an expedited basis, HECO is working with its consultants to develop bid specifications for the new EMS and develop drawings for the construction of the new Dispatch Center building. It is also coordinating project schedules so that delivery of the EMS coincides with the completion of the new Dispatch Center building.

HECO states that the Proposed Project is part of its strategic technology systems initiative. Through integration of

¹⁴See, Application at 23.

¹⁵See, Application at 23-24.

this project with the projects to replace its
Business Telecommunications Systems and Network and Customer
Information System ("CIS"), and implement its Outage Management
System ("OMS"), HECO and its customers will benefit through:

- Increased information availability and reliability, which should improve system reliability and allow for quicker response times to address problems and help avoid potential problems;
- Greater work efficacies from more effective data sharing and handling;
- Greater understanding of the status of transmission and distribution assets from the EMS and OMS;
- Automated outage status and updates from the OMS to respond to customer inquires; and
- Ability to offer advanced time-of-use metering and billing to all customers with the CIS, to control load growth and promote customer savings.

In its efforts to address the concerns and deficiencies with its EMS, HECO considered six (6) alternatives as set forth and discussed in its Application. Based on its evaluation and on the recommendations of the EMS 2003 Study, HECO decided to pursue Alternative 4--installing a modern EMS in a new

¹⁶See, Application at 26.

¹⁷See, Application at 26-33.

Dispatch Center, which HECO proposes in this Application. HECO anticipates putting the new Dispatch Center and EMS in service approximately twenty-six (26) months after obtaining commission approval of the Proposed Project and hopes to have the facility remodeling and relocation components of the Proposed Project completed within forty-five (45) months after obtaining commission approval.

III.

Parties' Positions

Α.

Consumer Advocate's SOP

The Consumer Advocate recommends that the commission approve HECO's commitment of funds for the Proposed Project, with certain qualifications. The Consumer Advocate conducted its review of HECO's Application in two (2) parts, identified as Elements 1 and 2. The Consumer Advocate contends that the capital improvement components making up both elements are primarily based on HECO's "perceived" need to replace its EMS. 18 "The other components of the project are proposed to either facilitate the installation of a new EMS, or because the overall project presented an opportunity for HECO to perform those components." 19

¹⁸ See, SOP at 3.

¹⁹See, SOP at 3-4.

Element 1

Consumer Advocate assessed HECO's proposal construct the new Dispatch Center building and related project components to relocate personnel to accommodate the construction of the building in "Element 1" of its review. Based on its assessment of the information provided in the record, the Consumer Advocate determined that the proposal to relocate the and the decision to existing Dispatch Center immediately adjacent to the existing first floor operations as described in the Application appear to be reasonable. The Consumer Advocate states that the operational and security concerns identified by HECO and its consultants support the need to relocate the center and that the chosen site for the building addresses HECO's security concerns with less displacement and relocation of its facilities and personnel, in light of the other Additionally, based on the Consumer Advocate's alternatives. review of the proposed relocation of certain facilities and personnel, it states that the relocations also appear reasonable and notes that the relocations should result in new operational efficiencies and increased productivity.

While reviewing the reasonableness of the cost of the components that make-up "Element 1", the Consumer Advocate states that since HECO had not completed the bid process for many of the

Proposed Project components, 20 it is concerned that the bid amount may be significantly different from HECO's estimated costs, resulting in actual costs being significantly larger than those estimated by HECO's consultants. Based on these concerns, the Consumer Advocate recommends that HECO be required to file certain reports in this docket or in its quarterly capital improvement project status reports to allow the commission and Advocate to monitor the the Consumer costs Proposed Project. The Consumer Advocate recommends that HECO file the following:

- The results of the bid estimates received for the construction of Component P0000713;
- 2. The results of the bid estimates received for the relocation and renovation work for Components P0000714, P0000793, P0000794, and P0000795;
- 3. The results of the bid estimates received for the renovation of the 2nd floor of the Purchasing Warehouse and costs associated with the relocation of HECO's Facilities personnel; and
- 4. If the bid estimates are ten (10) per cent greater than the amounts set forth in the Application, HECO should provide a narrative discussion that

The Consumer Advocate notes that HECO has not sent out bids for the construction of the Dispatch Center building and related work--Component P0000713. Additionally, bids for components P0000714, P0000793, P0000794, and P0000795 have also not been sent out since these components are dependent on the scope of the EMS and Dispatch Center replacement.

confirms that HECO still intends to move forward with constructing or placing those particular components and the reasons supporting that decision.²¹

The Consumer Advocate contends that the reporting requirements set forth above will give the commission and the Consumer Advocate an opportunity to evaluate the reasonableness of the costs of the Proposed Project for ratemaking purposes. Moreover, the Consumer Advocate states that if the bid estimates or actual costs significantly exceed the original estimates, HECO should re-evaluate the scope of the Proposed Project. The Consumer Advocates states that it wants to make clear that if HECO decides to move forward with the Proposed Project after being made aware of the cost increases, HECO does so "at its own risk and inclusion of those cost deviations in rate base will not be allowed unless it can be justified."22

2.

Element 2

In "Element 2", the Consumer Advocate assesses HECO's proposal to replace the existing EMS and install related equipment. Based on its analysis and review, the Consumer Advocate states that there appears to be a need to replace the existing EMS due to system reliability concerns. The Consumer Advocate supports HECO's efforts to improve system

²¹See, SOP at 14.

²²<u>See</u>, SOP at 15.

reliability and to meet its customer's expected service needs. However, the Consumer Advocate expressed concerns regarding HECO's request for commission approval to commit funds for the EMS replacement.

The Consumer Advocate states that HECO failed to it sufficient information for provide to determine reasonableness of the scope of the work for this section of the Proposed Project. For instance, since HECO is still working with its consultants to finalize the request for proposals ("RFPs") for Components P0000715, P0000717, and P0000718, information necessary for the Consumer Advocate to complete its review of the EMS, back-up EMS, dispatch boards, and DTS is not in the record. Additionally, the commission and Consumer Advocate cannot determine whether or not the new EMS will operate with other systems that HECO plans to purchase and install since the scope of the **EMS** equipment has identified. new not been The Consumer Advocate expresses further concerns regarding HECO's systems integrating and interfacing with each other and contends that these concerns are not unfounded since HECO's current EMS and SCADA systems do not interface or communicate with each other as originally planned. The Consumer Advocate alleges that this deficiency has contributed to the premature retirement of HECO's existing SCADA system and states that the appropriateness of allowing HECO to recover the cost for this system will be examined in HECO's next rate case.

While the Consumer Advocate recommends that the commission approve the commitment of funds for the components of

03-0360

"Element 2", it also recommends that HECO be required to provide evidence that the proposed investments in a new EMS and other related systems will be able to interface properly and not result in imprudent investments, and file two (2) reports to address project cost concerns and for evaluative purposes. In the first report HECO should:

- Describe the scope of work required for the telecommunication extensions (Component P0000716) and the associated costs based on the bids received;
- 2. Include a copy of the RFPs for Components P0000715, P0000717, and P0000718;
- 3. Name the vendor selected for providing the equipment for Components P0000715, P0000717, and P0000718 and associated costs with an explanation of how HECO selected the vendor; and
- 4. Describe the scope of work necessary to integrate the proposed EMS with projects HECO plans to implement in the near future.²³

The Consumer Advocate also recommends that HECO file a final project cost report within sixty (60) days of the completion of the Proposed Project, with an explanation of any deviation of ten (10) per cent or more in the estimated cost of the Proposed Project.

²³See, SOP at 23.

В.

HECO's Reply SOP

In its Reply SOP, HECO, among other things, responds to certain concerns of the Consumer Advocate as it relates to the record's sufficiency on cost issues. HECO also provides a status update of the Dispatch Center building and EMS request for attempts address ("RFQs"), and to the quotations Consumer Advocate's request for additional reports. indicates its willingness to file interim supplemental reports and additional data when possible.24 Moreover, HECO informed us of its intent to discuss the possibility of submitting a joint Consumer Advocate, addressing with the the letter Consumer Advocate's reporting requirements and clarifying its recommendations in an attempt to expedite the approval of the commitment of funds for the Proposed Project.

C.

Parties' Agreements

The Parties met on June 7, 2004, to address the various reporting requirements recommended by the Consumer Advocate in its SOP. To address the Consumer Advocate's concerns, the Parties agreed to the following:

1. HECO will submit an interim supplemental report once the bid processes have been completed for the two (2) major components of the project--the

 $^{^{24}\}mbox{On May 13, 2004, HECO}$ submitted, among other things, copies of its RFQs for the Dispatch Center building and the EMS replacement.

Dispatch Center building (Component P0000713), includes the Call which Center (Component P0000794); and the EMS Replacement (Component P0000717), which includes the DTS (Component P0000718).25 The EMS bid process is expected to be completed by September 2004.

- 2. HECO will submit information regarding the bids for the Dispatch Boards (Component P0000715) and the Console Workstations, which are included in Component P0000713, within thirty (30) days after the bid processes for both items are completed—expected to occur in 2005.
- 3. HECO will submit information regarding the portions of the Telecomm Extensions (Component P0000717) to be bid within thirty (30) days of the last bid awarded for this project component-expected to occur in 2005.
- 4. HECO will submit information regarding the bids for the Field Service/Meter Reading renovation/relocation (Component P0000793) within thirty (30) days after the bid process for this component is completed-expected to occur in 2006.
- 5. HECO will submit information regarding the bids for the Parking Relocation for Construction and Maintenance Department, System Operation and

²⁵Bid process completion means that the final contractor/vendor selections have been made and bids have been awarded. <u>See</u>, Agreement Letter at 3.

Employee vehicles within thirty (30) days after the bid process for this work is completed--expected to occur in 2007.

- 6. HECO will inform the commission and the Consumer Advocate within thirty (30) days after it retains the services of a third-party system integrator and will provide information developed the system integrator regarding by interoperability, when available.
- 7. HECO will provide a comparison of the estimated and actual costs associated with the second floor Purchasing building renovation and relocation of HECO's Facilities personnel.²⁶

Moreover, the Consumer Advocate clarifies its recommendations to the commission with regards to the matters of this docket. First, it recommends that the commission "approve the commitment of funds for the [P]roposed [P]roject, subject to reporting requirements agreed" upon by the the Second, the Consumer Advocate recommends that the commission "not make a decision on whether the cost of a component of the project can be included in rate base for ratemaking purposes until a rate case is conducted with a test year in which or after which the component is completed and placed in service."28

 $^{^{26}}$ See, Agreement Letter at 3-4.

²⁷See, Agreement Letter at 4.

 $^{^{28}}$ Id.

Findings and Conclusions

The commission will approve the expenditure of funds for the Proposed Project, subject to the reporting requirements forth agreed upon by the Parties, as set in their Agreement Letter. We find HECO's justifications for the Proposed Project to be reasonable. The problems with HECO's current EMS are well-documented and a new system with more functionality should benefit the public. HECO's decision to install its new EMS in a new Dispatch Center building is understandable due to and security concerns limitations with its current space Dispatch Center building. Additionally, the agreements reached Parties should provide the commission by the and the Consumer Advocate with the ability to review and monitor the Proposed Project as it progresses.

Based on the above, the commission concludes that the Application to expend approximately \$22,909,230 for Item Y00030, its new Dispatch Center project (which includes a new EMS) should be approved; subject to the reporting requirements agreed upon by the Parties, as set forth in their Agreement Letter.

V.

Orders

THE COMMISSION ORDERS:

1. HECO's request to expend approximately \$22,909,230 for Item Y00030, its new Dispatch Center project (which includes a new EMS), as described in the Application, is approved;

provided that no part of the Proposed Project may be included in HECO's rate base unless and until the project is in fact installed, and is used and useful for utility purposes.

- 2. The approval of HECO's Proposed Project, as described in the Application, is subject to the reporting requirements agreed upon by the Parties, as described above in Section III.C. of this decision and order.
- 3. Within sixty (60) days of the completion of the Proposed Project, HECO shall submit an accounting report with an explanation of any deviation of ten (10) per cent or more of the projected costs for the Proposed Project. Failure to submit the report, as required in this decision and order, constitutes cause to limit the total cost of the Proposed Project for ratemaking purposes to that estimated in HECO's Application.
- 4. HECO shall conform to all of the commission's orders, set forth above. Failure to adhere to our orders constitutes cause for the commission to void this decision and order, and may result in further regulatory actions as authorized by law.

PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Carlito P. Caliboso, Chalirman

APPROVED AS TO FORM:

Commission Counsel

03-0360.eh

CERTIFICATE OF SERVICE

I hereby certify that I have this date served a copy of the foregoing <u>Decision and Order No. 21224</u> upon the following parties, by causing a copy hereof to be mailed, postage prepaid, and properly addressed to each such party.

DEPARTMENT OF COMMERCE AND CONSUMER AFFAIRS DIVISION OF CONSUMER ADVOCACY P. O. Box 541 Honolulu, HI 96809

WILLIAM A. BONNET VICE PRESIDENT GOVERNMENT AND COMMUNITY AFFAIRS HAWAIIAN ELECTRIC COMPANY, INC. P. O. Box 2750 Honolulu, HI 96840-0001

LORIE ANN NAGATA
TREASURER
HAWAIIAN ELECTRIC COMPANY, INC.
P. O. Box 2750
Honolulu, HI 96840-0001

THOMAS W. WILLIAMS, JR., ESQ.
PETER Y. KIKUTA, ESQ.
GOODSILL ANDERSON QUINN & STIFEL
Alii Place, Suite 1800
1099 Alakea Street
Honolulu, HI 96813

Karen Higashi

DATED: AUG 0 6 2004